



TLS120Xe
High Power Tuneable Light Source
(280-1100nm)

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The TLS120Xe is a high power tuneable light source that delivers superlative stability, high wavelength agility and the power of continuous tuning.

Bringing together high optical performance and the convenience of a single, plug-and-play unit, the TLS120Xe gives you the power of monochromatic light at your fingertips.

Associating the TLS120Xe with accessories from our portfolio can provide a full measurement setup in a wide range of applications.

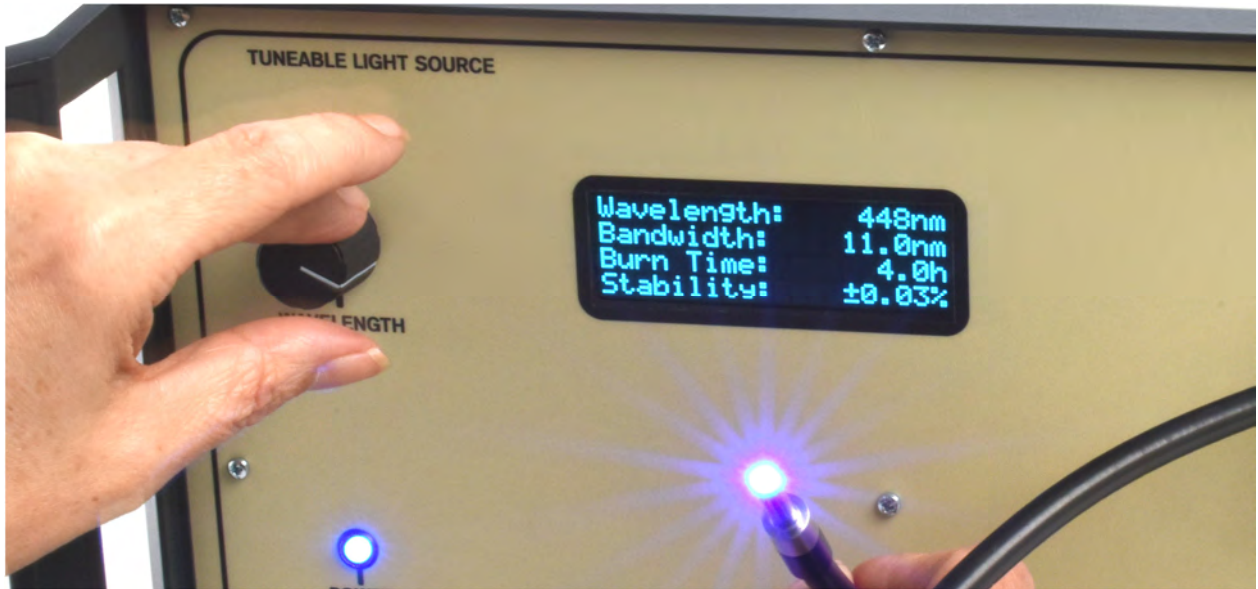
Benefits:

- Continuously tuneable high power monochromatic source
- Easy to use, with manual or automated (USB 2.0) operation
- Plug-and-play functionality
- Ideal for wide range of application through UV-Vis-NIR
- Portability

Key features:

- Ultra-quiet 75W short-arc xenon light source with starter and constant power supply
- 150mm focal length monochromator
- Manual wavelength control through front panel
- Windows® control and data acquisition software provides full automation via USB 2.0
- Forms part of a fully automated spectrophotometer/ spectrometer with Benwin+ Windows application
- Range of light coupling options
- Monolithic, portable unit, ideally suited for OEM applications
- Mains powered
- Ease of mounting into 19" rack (4U)





Operation Modes

The TLS120Xe delivers high-operational functionality via a local or PC interface.

Whilst operating in **Local mode**, the selected wavelength may be set manually. Alternatively, **PC mode** will offer users full automation of the TLS120Xe using our BenWin+ Windows® application or in implementing a SCPI protocol.

Display

The OLED display featured on the TLS120Xe provides users with the following parameters throughout operation:

- Selected wavelength
- Bandwidth
- Lamp burn-time
- Output stability (standard deviation is calculated on 10 samples)

Coupling options

Part Number	Spectral Range (nm)	Description
FOP-UV-4-4-1000	200-1350	1m long, UV grade doped quartz fibre bundle. 4mm diameter profile at both ends, 0.22 NA.
SMA-1.5-1000	300-1200	1m long, UV grade doped quartz multimode fibre patch cable, 1.5mm core diameter, SMA/SMA, 0.39 NA
LLG-3-1000	275-700	1m long, liquid light guide, 3mm diameter.

Specification

Light source	Integral 75W high-brightness Xe lamp with starter and constant current power supply
Output Power	Typical output >4mW in 12nm bandwidth at 475nm.
Wavelength range	Typically 280-700 nm 1nm resolution +/- 1nm precision using 1200 g/mm grating (Alternative gratings available for use over other ranges 200-1100nm)
Switching time	100ms max per wavelength change, 50ms for 100nm wavelength change
Output bandwidth	6, 12, 20 & 40nm via user selectable slit set. Other bandwidths are available
Coupling	High throughput robust silica fibre or liquid light guide allowing ease of mounting to microscope adapter
Construction	Monolithic unit, ideally suited for OEM applications

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